

A New Species of *Calycolpus* (Myrtaceae) from the Campos Rupestres, Minas Gerais, Brazil

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ABSTRACT. *Calycolpus australis* (Myrtaceae) of Minas Gerais, Brazil, is described as a new species. It is perhaps most similar to *C. alternifolius* but differs in various floral characters. This new species extends the range of the genus six degrees of latitude farther south.

Calycolpus is a genus of ca. 10 species ranging from Central America to Brazil with the greatest diversity in northeastern South America, especially in the Guyana Highlands (McVaugh, 1969). It is closely related to *Psidium*, but can be distinguished from that and other related genera by floral and seed coat characters (Landrum & Sharp, 1989). Recently a new species has come to my attention from the "campos rupestres" of Minas Gerais of Brazil that extends the southern range of *Calycolpus* nearly six degrees of latitude farther south.

Calycolpus australis Landrum, sp. nov. TYPE: Brazil. Minas Gerais: Itambé do Mato Dentro, estrada para Serra Cabeça de Boi, 5 km de Itambé, 13 Jan. 1982 (fl), N. Hensold, M. T. Rodrigues, N. L. Menezes & M. L. Kawasaki CFCR 2836 (holotype, SPF 22316; isotypes, ASU, UB). Figure 1.

C. alternifolius (Gleason) Landrum primo aspectu simillima, sed flores multi grandiores.

Frutex circa 2-metralis; pili albi vel luteoli, simplices; ramuli juventute breviter tomentosi; folia 1.7–5.3 cm longa, 1.1–2.5 cm lata, 1.2–3-plo longiora quam latiora; apex acutus vel acuminatus vel rotundatus nonnunquam cuspidatus; basis rotundata vel acuta; laminae coriaceae, in sicco atrovirideo-olivaceae vel atrorufo-brunneae; hypanthium campanulatum, 5–6 mm longum, dense puberulum; stylus circa 11 mm longus, glaber; stamina 250–300, circa 10 mm longa, antheris circa 1.3 mm longis, connectivum 7–14-glandulis; ovarium 3–4-loculare, loculis 9–14-ovulatis.

Shrub to ca. 2 m high, the young growth and lower leaf surface densely short-tomentose; hairs simple, whitish or yellowish, up to ca. 1 mm long, often curly; young twigs shortly tomentose, sometimes losing most hairs, then reddish brown, sometimes obscurely 4-winged, the bark of older twigs becoming rough, gray; leaves elliptic, ovate, lanceolate, or obovate, 1.7–5.3 cm long, 1.1–2.5 cm

wide, 1.2–3 times as long as wide; apex acute or acuminate to rounded, sometimes cuspidate; base rounded to acute; petiole weakly channeled or flat, 1–2 mm long, 1–1.5 mm thick, tomentose to glabrous; midvein impressed above, prominent below; lateral and marginal veins indistinct; blades coriaceous, drying dark olive-green to reddish brown, with many minute glands visible above; peduncles 1.5–3 cm long, 1.5–2 mm wide at apex, solitary, thinly pubescent; bracteoles apparently caducous early, only one seen, perhaps not typical, ca. 6 mm long, ca. 1 mm wide; calyx lobes two-parted, the base an extension of the hypanthium, ca. 3 mm long, ca. 5–6 mm wide, rectangular, puberulent within and without, slightly concave within, fused along the margins with the adjacent bases for about ½ of length, the distal portion of calyx lobe (appendage) leafy, oblong-triangular, glabrous, 6–11 mm long, ca. 4–6 mm wide, erect or reflexed, sparsely to densely pubescent beneath, subglabrous to pubescent above; petals obovate, concave, ca. 1.5 cm long, ca. 1.2 cm wide; hypanthium campanulate, 5–6 mm long, densely pubescent, tearing ca. 1 mm between calyx lobe bases at anthesis; disk ca. 7 mm across, the staminal ring puberulent, ca. 3 mm wide; stamens 250–300, ca. 10 mm long; anthers 1.3 mm long, with 7–14 glands in connective; style 11 mm long; ovary 3–4-locular; ovules 9–14 per locule, the placenta an oblong pad, sometimes slightly raised; fruit subglobose, about 1 cm diam., dark purple beneath hairs; seeds apparently few, ca. 2.5–3 mm long, the seed coat lustrous, ca. 1 cell thick across distal wall, the cells nearly isodiametric.

Calycolpus australis is most similar to *C. alternifolius*. The differences are summarized in the key below.

- 1a. Closed flower bud ca. 7 mm long; disk 2–4 mm across; calyx lobes triangular, not two-parted, 3–5 mm long; petals 8–9 mm long; stamens 38–70, 3–5 mm long; style ca. 5 mm *C. alternifolius*
- 1b. Closed flower bud ca. 15 mm long; disk ca. 7 mm across; calyx lobes two-parted (see description), the distal leafy portion 6–11 mm long; petals ca. 15 mm long; stamens 250–300, ca. 10 mm long; style ca. 11 mm long *C. australis*

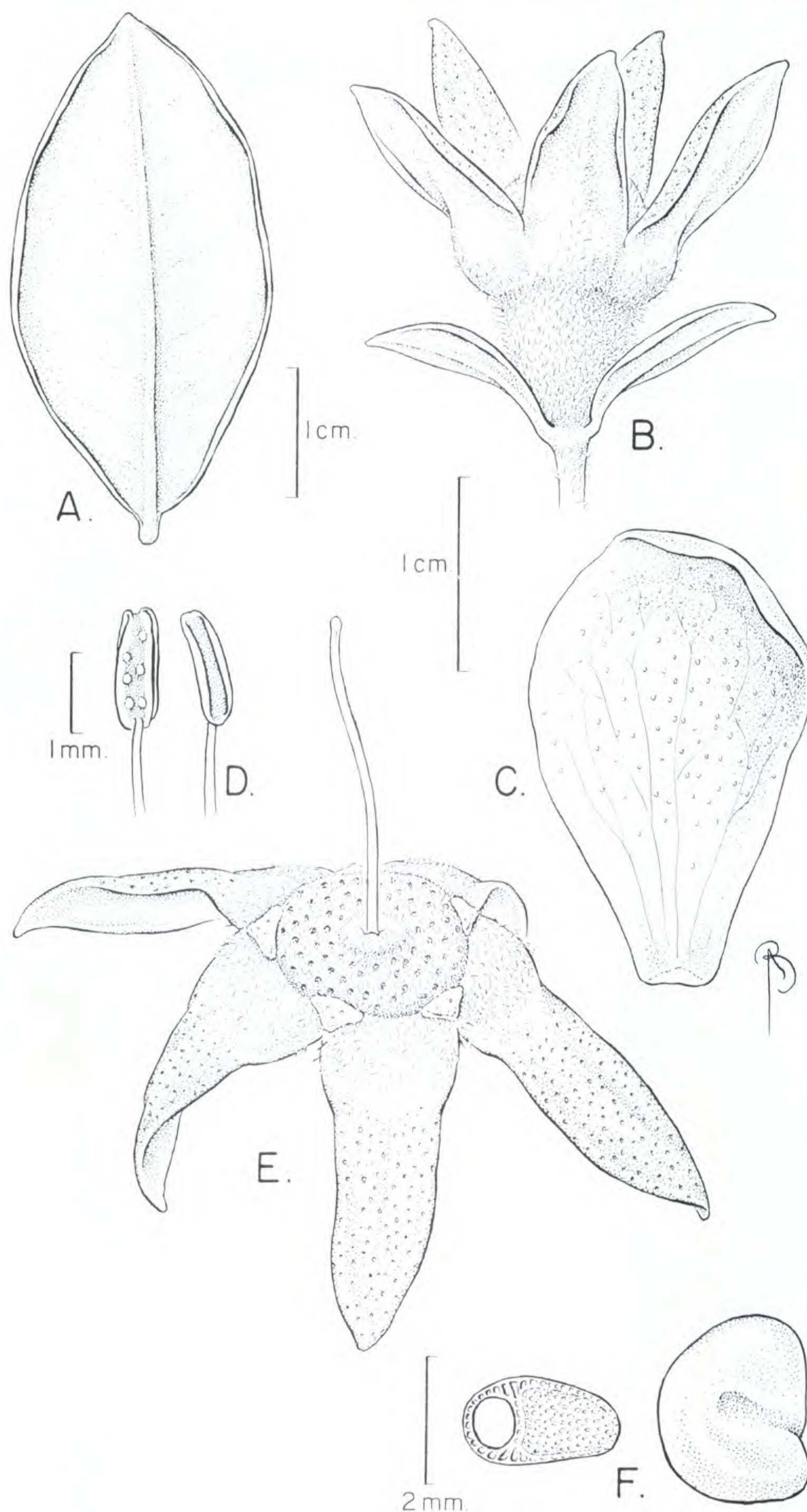


Figure 1. *Calycolpus australis* Landrum. —A. Leaf from below. —B. Flower bud showing calyx lobes with clasping concave base and leafy distal portion (appendage). —C. Petal showing inner surface. —D. Two anthers, one showing glands in the connective. —E. Flower after anthesis showing calyx lobes with pubescent base and glabrous appendage. —F. Seed in section and a side view. A–E drawn from *Hensold et al. CFCR 2836 (SPF 22316)*; F drawn from *Kawasaki et al. 870*.

Calycolpus australis forms a morphological link between *C. alternifolius*, a somewhat unusual species in the genus, and the more typical species, *C. goetheanus* (DC.) O. Berg, for instance. Its closest geographic relative is *C. legrandii* Mattos of Bahia and Sergipe. *Calycolpus australis* grows in very rocky soil that appears to be quite sterile. The general vegetation is a sparse growth of shrubs. *Calycolpus legrandii* grows in sandy “restinga” habitats, and *C. alternifolius* on rocky tepui summits. Perhaps species of *Calycolpus* are best able to compete on nutrient-poor substrates. *Calycolpus australis* is known from a single locality and thus may be quite restricted in distribution.

Paratypes. BRAZIL. **Minas Gerais:** Itambé do Mato Dentro, estrada para a Serra da Cabeça de Boi, ca. 500–800 m após o Canta Galo, campo rupestre, 9 Aug. 1992 (fl), J. R. Stehmann & M. Sobral 1111 (ASU); Itambé do

Mato Dentro, 5 km de Itambé, estrada para Serra Cabeça de Boi, depois da praia Canta Galo, 12 Oct. 1995 (fl), M. L. Kawasaki, L. R. Landrum & S. S. Landrum 870 (fr), 869, 871, 872, & 873 (young fr) (all ASU, SP).

Acknowledgments. I am grateful to M. Sobral for bringing this new species to my attention. I thank M. L. Kawasaki for helping to locate and collect specimens in the field and for a careful review of this manuscript. Fieldwork in Brazil was made possible by a Fulbright American Republics grant. Figure 1 was drawn by Bobbi Angell.

Literature Cited

- Landrum, L. R. & W. P. Sharp. 1989. Seed coat characters of some American Myrtinae (Myrtaceae): *Psidium* and related genera. *Syst. Bot.* 14: 370–376.
- McVaugh, R. 1969. Myrtaceae. *In:* The botany of the Guayana Highland—Pt. 8. *Mem. New York Bot. Gard.* 18(2): 55–286.